

Abstract of the Disclosure

A color separating and mixing element comprises, in its transparent cube, a first optical function surface formed on a dividing surface for dividing the cube into two triangular prisms and a second optical function surface formed on another dividing surface. The first optical function surface has the function of transmitting both P-polarized light and S-polarized light with respect to red light, has the function of transmitting both P-polarized light and S-polarized light with respect to green light, and has the function of transmitting P-polarized light and reflecting S-polarized light with respect to blue light. The second optical function surface has the function of transmitting P-polarized light and reflecting S-polarized light with respect to red light, has the function of transmitting P-polarized light and reflecting S-polarized light with respect to green light, and has the function of transmitting both P-polarized light and S-polarized light with respect to blue light.